

Changes to the Drawings

The attached replacement sheets (Sheets 1-4) of drawings include changes to FIGS. 1, 3, 4, 5, 6, and 7. It is requested that these sheets replace the original sheets.

Attachment: Replacement Sheets 1-4.

REMARKS

The applicants have carefully considered the Office action dated September 30, 2009. By way of the forgoing amendments, claim 1 has been amended to include all of the recited elements of previously examined dependent claims 8, 11, and 12. Claims 8, 11, 12, and 30 have been canceled without prejudice. No new subject matter has been added, as support for the amendments may be found, for example, in the application as originally filed at paragraphs [0023], and [0056].

Thus, claims 1-7, 9, 10, 13-29, and 31 are pending and at issue. Of the claims at issue, claim 1 is an independent claim.

In view of the foregoing amendments and the following remarks, reconsideration of the application is respectfully requested.

Specification

The specification has been amended to reflect that the reference lines of FIG. 5 have been amended to replace the original Roman numerals with their corresponding Arabic numerals.

Abstract

The Abstract has been amended to remove legal phraseology and to insert the missing text on line 4. The foregoing amendments should eliminate any objection to the Abstract.

Drawings

The drawings have been amended to correctly cross hatch the sectional views of FIGS. 1, 3, 4, 5, 6, and 7. Additionally, the reference lines of FIG. 5 have been amended to replace the original Roman numerals with their corresponding Arabic numerals.

Claims 29 and 31 have been amended to indicate that the bottle jacket comprises a polyolefin and polypropylene, respectively. Claim 30 has been canceled without prejudice.

The foregoing amendments should eliminate any objection to the drawings.

The Rejection under 35 U.S.C. § 112

Claims 1-31 stand rejected under 35 U.S.C. § 112 as being indefinite for failing to particularly point out and distinctly claim the subject matter regarded as the invention. Claims 1, 2, and 23 have been amended to correct proper antecedent basis. Claim 28 has been amended to remove the term “or the like.” Claims 29 and 31 have been amended to clarify that the applicants intend to claim a product, namely a bottle. As noted above, claim 30 has been canceled without prejudice.

The foregoing should eliminate any rejection under 35 U.S.C. §112 that may have been proper.

The Rejections under 35 U.S.C. § 103

Claims 1, 2, 4-6, 13-16, 26, and 28 were rejected as being unpatentable over Rodriguez (US 5,699,921) in view of Renz (US 6,645,228). Claim 8 is rejected as being unpatentable over Rodriguez, in view of Renz, in further view of Sidi (GB 2238729). Claims 10-12 are rejected as being unpatentable over Rodriguez, in view of Renz, in further view of Greenwood (US 5,499,729). As noted above, claim 1 has been amended to include the recitations of claims 8, 11 and 12.

It is respectfully submitted that all claims are allowable over these patents for at least the reasons set forth below.

As amended Independent claim 1 is generally directed to a bottle having a substantially conical shape, and a diaphragm air valve. In particular, claim 1 recites, *inter alia*, a bottle including a bottle jacket having a substantially conical shape widening from the teat-side end region to the bottom-side end region and the wall thickness of the shaft of the teat is greater than

the wall thickness of the teat in the lip contacting region and of the nipple. The air valve comprises a circular-ring-shaped diaphragm, and the base cap comprises a central elevated portion, and the diaphragm is inserted in the base cap in a pre-stressed state, and in a closed position of the air valve an inner end portion of the diaphragm abuts on the central elevated portion of the base cap.

Claim 1, as amended, was rejected as obvious over Rodriguez, in view of Renz, in further view of Sidi, and in further view of Greenwood.

It is well established, however, that the prior art must teach or suggest each of the claim elements ... to establish a *prima facie* case of obviousness. See *In re Oetiker*, 24 USPQ. 2d 1443, 1446 (Fed. Cir. 1992); *Ex parte Clapp*, 227 USPQ. 972, 973 (Bd. Pat. App. 1985); *In re Royka*, 490 F.2d 981 (CCPA 1974) and M.P.E.P. § 2143. None of Rodriguez, Renz, Sidi, or Greenwood, either alone or in combination, describes the a conical shape widening from the teat-side end region to the bottom-side end region, or the air valve as recited in amended claim 1. Accordingly, it follows that none of Rodriguez, Renz, Sidi, or Greenwood, either alone or in combination, can render obvious claim 1 or any claims dependent thereon.

In contrast, Rodriguez is directed to a cylindrical baby bottle with a constant diameter having an air valve 46 disposed at the bottom end of a liquid container 20. On the opposite side, a nipple 36 is secured to a top cap 34 connected to the container 20 by a thread 34. According to a common design for baby bottles, the diameter of the liquid container 20 is larger than the diameter of top cap 34, but Rodriguez teaches a cylindrical shape for the container 20, that is a container 20 having a constant diameter, as can be seen from the figures and is also expressly mentioned in the specification of Rodriguez, col. 4, l. 22-24.

Renz, meanwhile is directed to a bottle nipple, and similarly fails to describe a conical shape widening from the teat-side end region to the bottom-side end region.

Likewise, Sidi describes a feeding bottle 10 having an air inlet 13 at the remote end from a teat (12). The bottle body 11 is a cylindrical body with a constant diameter, as can be seen from FIG. 1. Therefore, Sidi fails to teach or suggest a bottle having a conical shape widening from the teat-side end region to the bottom-side end region, as recited in claim 1.

Finally, Greenwood describes a bottle 20 having a cylindrical housing 21 that is axially (or longitudinally) elongated. While in one embodiment, the housing 21 is illustrated as slightly bowed in the mid-section (see FIG. 2), the housing 21 clearly is illustrated as generally cylindrical. Furthermore, as described in Greenwood, “the cap member 28 and 29 and the lip regions 26 and 27 are each identical in respective configurations so that the cap members 28 and 29 are interchangeable.” (*Greenwood*, col. 3, ll. 64-67; emphasis added). While Greenwood suggests that the base may be wider for “standing stability of the like,” Greenwood fails to specifically describe a conical shape as recited in the present claims. (*Greenwood*, col. 6, ll. 60-63; emphasis added)

Accordingly, the bottles described in each of Rodriguez, Sidi, and Greenwood are clearly different from the conically widening shape from the teat-side end region to the bottom-side end region according to the present invention recited in claim 1. The claimed conical shape includes a number of advantages not described in any of Rodriguez, Sidi, or Greenwood. For example, because of the substantially conical shape of the bottle, which widens towards its bottom-side end, a comparatively large bottom-side valve is obtained through which very slight pressure differences can be equalized.

Still further, each of the cited references fail to teach or suggest an air valve comprising a circular-ring-shaped diaphragm and a base cap having a central elevated portion, wherein the diaphragm is inserted in the base cap in a pre-stressed state, and in a closed position of the air valve an inner end portion of the diaphragm abuts on the central elevated portion of the base cap, as recited in claim 1.

In contrast, the baby bottle of Rodriguez comprises a one-way air valve 46 that is positioned intermediate a cylindrical flange 44 of bottom cylindrical cap 38 and a flange 32 of the rearward bottom end 24 of container 20. The air valve 46 has two curved portions 48, which, in a closed position of the air valve 46, abut on each other. A vacuum in the interior of the container 20 upon application of a negative pressure is released by air streaming from the outside through an opening in the base cap 38 and the air valve 46. The cylindrical flange 44 forms an elevated portion of the bottom cap 38. However, Rodriguez fails to disclose that in a closed position of the air valve an inner end portion of a diaphragm abuts on the central elevated portion of the base cap according to the invention. The flange 44 does not serve as a supporting element for a diaphragm, but rather, defines an interior air channel.

Sidi, meanwhile, describes a drinking bottle having an air valve 13 formed by a membrane 15 secured between an outer wall 14 having an aperture and the bottom end of a body 11. The membrane 15 has a slit which is opened upon application of negative pressure during drinking, so as to allow air to enter the bottle. Sidi, however, is completely silent about a central elevated portion of the bottom cap. Accordingly, Sidi also fails to show that in a closed position of the air valve an inner end portion of the membrane abuts on the central elevated portion of the base cap according to recited claim 1.

Finally, the baby bottle of Greenwood is in similar to the bottle described in Sidi, in that openings 43 formed in a membrane 42 that is secured to bottom cap member 29 are opened when an infant applies sucking pressure to nipple 39. This reference, however, also lacks any teaching or suggestion of a central elevated portion upon which the membrane abuts in a closed position of the air valve, as is provided for in the present air valve.

Consequently, none of the cited references provide for a baby bottle that simulates the infant's natural food intake. In particular, as described in the present application, the bottle as recited in claim 1 can advantageously achieve the simulation of the natural food intake because the provided baby bottle has a teat with a thin wall thickness in the lip-containing region. This thin wall thickness, however, is possible with the pre-stressed diaphragm of the bottom air valve as defined in amended claim 1, as otherwise the teat would likely collapse.

Therefore, due to the deficiencies in each of the cited references, it follows that no combination of Rodriguez, Renz, Sidi, or Greenwood can render obvious claim 1 or any claims dependent thereon. In particular, because none of the references teaches or suggests either a conical shape widening from the teat-side end region to the bottom-side end region, or the air valve as recited in amended claim 1, no combination of the cited references can render claim 1 unpatentable. Accordingly, it is respectfully submitted that claim 1 and all claims dependent thereon are in condition for allowance.

Conclusion

Reconsideration of the application and allowance thereof are respectfully requested. If there is any matter that the examiner would like to discuss, the examiner is invited to contact the undersigned representative at the telephone number set forth below.

The Commissioner is hereby authorized to charge any deficiency in the amount enclosed or any additional fees which may be required during the pendency of this application to Deposit Account No. 12-0400.

Respectfully submitted,
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